Teachers' Self-efficacy for Writing

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Abstract

Introduction: While "teaching self-efficacy" has been supported as an important construct related to teacher competence (eg. Goddard, Hoy & Hoy, 2000), little is known about how in-service teachers think about themselves as writers, or writing self-efficacy, particularly as it relates to writing performance. The present study is a preliminary examination of the relationship between teachers' writing self – efficacy and writing performance.

Method: The Low Self-Efficacy scale (Lavelle & Guarino, 2003), which measures adults' beliefs regarding writing competence, was administered to 64 teachers, currently enrolled in a graduate course where writing an academic research paper was part of the regular course requirement, thus scale scores as well as writing outcomes served as research variables. Two raters were trained to evaluate the writing sample according to two measures: a wholistic rubric designed to reflect general writing competence and a deep and surface rubric which measured writing structure, audience and personal involvement.

Results: Data analysis involved examination of the correlation between writing quality as measured by the wholistic rubric and low self-efficacy scale scores, and consideration of differences between deep and surface writing outcomes using writing scale scores as a dependent variable. Results support the relationship between writing self-efficacy and writing performance as measured by both rubrics.

Discussion and Conclusion: Conclusions support the hypothesis regarding the relationship of writing skill and self efficacy as linked to each of the two rubrics. Implications for further research are discussed.

Keywords: self-efficacy, teacher beliefs, writing skills, graduate education

Introduction

A range of studies have examined various dimensions of perceived teacher self – efficacy which is usually construed to encompass teachers' perceptions regarding their own power to influence various dimensions of practice: instructional self-efficacy (Goddard, Hoy & Hoy, 2000), management self-efficacy (Enochs, 1995), and is linked to specific variables such as the relationship between self- efficacy and burnout (Caprara, Barbaranelli, Borgogni & Steca, 2003; Hastings & Bham, 2003). Along the same line, teaching self-efficacy inventories have emerged which address dimensions such as instructional efficacy, efficacy to influence decision making, efficacy to influence school resources, and management efficacy (cf.Teacher Scales of Self-Efficacy, 2005). While teaching efficacy is critical to teaching performance, it is also important to know about teachers' efficacy beliefs for successfully engaging and negotiating professional and academic tasks that are directly related to instruction, such as writing. Beliefs in one's own task competence, as well as actual skill, play an important role in teaching effectiveness (Wilson & Floden, 2003). This preliminary study is designed to examine in-service teachers writing self-efficacy as linked to writing performance.

Writing Self-Efficacy

While many studies have addressed teachers' beliefs about teaching writing (Benton, 1999; McLeod, 1995; Moore, 2000), few have considered teachers beliefs about their own writing skill. In exception, Frank (2003) examined how teachers who were low in writing self-efficacy, became engaged when writing their own stories. She argued that writing self-efficacy is raised as teachers explore the "inscape" of their own cultural and personal stories, and as they connect to the experiences of other teachers. Similarly, working with preservice teachers, Shell (1989) found relationships between self-efficacy and achievement in both reading and writing. Along the same line, Wachholz and Etheridge (1996) examined differences in writing self-efficacy beliefs for high and low writing apprehensive preservice teachers, and linked prior experiences to writing efficacy as well as establishing a relationship between writing self-efficacy to writing performance.

More generally, there is a significant body of social cognitive research reflecting the writing self-efficacy of college students. Using path analysis, Zimmerman and Bandura (1994) found various facets of college students' perceived self-efficacy linked to writing course attainment and Pajares and Johnson (1993) predicted writing performance using a self-efficacy scale developed by Shell (as cited in Pajares et al., 1993). Lavelle developed a writ-

ing self-efficacy scale as part of her work addressing the beliefs and strategies that undergraduate writers employ in writing, *Inventory of Processes in College Composition* (1993, 1997, 2003). High scores on the low self-efficacy scale describe a writing approach based on doubt and on thinking about writing as a painful task. Strategies that low self-efficacy writers use include focus on micro level skills, such as grammar and punctuation, and reliance on social support. Similarly, college writing performance had been linked to low writing self-efficacy (Daly & Wilson, 1983; Meier, McCarthy & Schmeck 1984) and Lavelle found low self-efficacy scale scores predictive of writing apprehension, and the quality of writing outcomes (Lavelle, 1997). Appendix A provides the items and factor loadings for the low self-efficacy scale for undergraduate student writing.

Teachers' Writing Self-Efficacy

In working with teachers who had returned to college and enrolled in core courses required for the masters degree in education, Lavelle conducted a large (n=423) psychometric study to examine the relationship of writing beliefs and writing strategies as reflected in a self-report writing questionnaire (Lavelle, 2005). A factor analytic strategy revealed a Low Self-efficacy factor, similar to that found with undergraduates, that describs a "needy" predisposition toward writing with little confidence in skill or belief in success, which accounted for 10% of the variance in writing. Mean scores were 26 with a standard deviation of 4.3 and internal consistency of .63 (Chronbach alpha). There were no significant differences in scale scores means by gender, level taught (preschool, K-3, 4-6, Middle School or Secondary) or by age.

In this study, the low self-efficacy scale for teachers was marked by a "paralyzing" fear of writing, based on teachers' perceived needs for social encouragement and teacher support, and by general self-doubt regarding writing skills. Appendix B provides the items and factor loadings for the low self-efficacy in writing scale.

In order to further examine teachers' self-efficacy for writing, two further analyses were conducted to determine the relationship of scale scores to writing performance. The first analysis investigated the relationship of low self-efficacy scale scores to writing quality and the second analysis tested for differences in writing quality based on classifying students as deep or surface writers.

Method

Participants

Participants were 64 teachers enrolled in a required course in Advanced Educational Psychology at a large Midwestern public university. Of the 64, 17 were male and 47 were female. All were employed as teachers in either public or parochial schools in the area. Teachers were taking the course as a core requirement for the master degree in education.

Instrumentation and Procedure

The Low-Self-efficacy Scale (Lavelle, 1993, 1997; Lavelle & Guarino, 2003) was administered to participants at the beginning of the course. Additionally, students responded to three items reflecting, gender, age and level or teaching experience. Students responded to each of the 11 items using a Likert scale and indicating answers on a scantron sheet. Students were ensured of privacy and participation was voluntary.

As part of the regular course requirements, students were instructed to write a response to any topic covered in the assigned readings as a homework project. The text addressed theoretical topics such as cognition, self-regulation, motivation, learning, and assessment. Students were asked to reflect on a particular topic or specific subtopic and then to provide a written response which might involve unstructured reflection, comparing and contrasting, personal reaction, argumentation, or extension and application to practice. Written responses were required to range from 5 to 10 pages. Written instructions were provided and students completed the assignment as homework.

In order to evaluate the writing sample, two graduate students were trained to rate the quality of writing using both a deep and surface rubric (Lavelle, 2003) and a holistic rubric (Creehan, 1997). The deep and surface rubric supported two basic categories or styles of writing performance, deep meaningful writing v. surface or linear superficial writing (see Lavelle Guarino, 2003, and Lavelle, 2003, for a review) based on four criteria: Reflective (applied or referenced) v. Reportorial (listing of information), Hierarchical (thesis supporting) v. linear (listing), and overall meaningfulness. Appendix C reflects the general criteria for the deep and surface writing distinction and the basis for the development of the rubric. Similarly, the holistic rubric was explained and demonstrated and was used to evaluate sample essays along three levels. Essays were rated on a scale of 1 to 3 as "poor" generally not reflective of all the criteria; "fair" reflective of most criteria; and "very good" or reflective of all the criteria. Holistic evaluation which is an overall impression based on criteria such as organization, integration, fluency, audience, voice and word usage (Creehan, 1997), is common in writing research

and is supported as reliable when raters are give appropriate training to include practice in evaluating sample essays (Galbato & Markus, 1995). After competing training, raters evaluated all writing samples. Interpreter reliability was r=.71 for the deep and surface rubric and r=.74 for the holistic rubric.

Results

In order to test for the relationship between quality of writing as measured by the holistic rubric and scale scores on the self-efficacy for writing scale, a Spearman ranks correlation was executed. Results support a moderate negative relationship to writing performance, *r = -.395, p.<.00*, indicating that low self-efficacy as measured by a high scale score, was related to poor writing quality. Similar trends had been supported previously (cf. Lavelle, 1997).

In examining the relationship of quality of writing as measured by the deep and surface rubric and self-efficacy for writing, a *t* test was conducted to test for self-efficacy scale score differences between deep and surface writing. Deep and surface constructs describe the quality of writing performance along two continua, previously discussed. There was a significant effect for deep/surface writing (*t) = 2.06, p. < .05),* with writers categorized as deep receiving higher holistic evaluations (Table 1). Table 2 reflects means and standard deviations for the deep and surface outcome variables. There were not significant gender, age or level differences on either variable.

Discussion

Teachers at the graduate level are often faced with journals, brief papers and critiques based on a simplistic, linear structure, reliant on simple sentences, and confounded by inappropriate usage and vocabulary deficits. Bereiter and Scardamalia (1982) have referred to children's' writing as "bed-to-bed" writing; first I got up, then I went out, then I had lunch, then I came home…" Unfortunately, "bed-to-bed" writing exists even at the graduate level. This study supports the developing notion that writing self-efficacy is an important key to understanding how it is that teachers think about their own writing and what they do when faced with a particular writing task. Writing self-efficacy had previously been linked to performance (cf. Zimmerman & Bandura, 1994; Pajares & Johnson, 1993) and to the development of writing skill among in-service teachers (Frank, 2003) and, to the writing and reading performance of preservice teachers (Shell, 1998). Also it serves to operationalize the construct of writing self-efficacy as linked to writing performance.

Writing is a complex undertaking. Perhaps no other task mandates attention at so many levels—thematic, paragraph, sentence, lexical and grammatical. Genre may be familiar or novel, comfortable or perplexing, and issues such as audience and development of voice in writing are often vague. Indeed making a meaning in writing calls not only for advanced skills but also for self-knowledge of oneself as a writer or "wearing the writer's hat." When self-efficacy is high, writers are more able to critique their own writing and to persevere on that often nebulous plateau. When writing efficacy is low, critique is painful. Probably most of us have felt the pain of the "red pen assault" at one time or another. Some of us were hearty and learned from this, others perhaps internalized the idea that I am a poor writer.

Finally, this study is the first step in understanding teachers' beliefs about writing competence. Further research will address how it is that writing beliefs impact writing instruction. Specifically, it will be important to learn how teachers value writing as a tool of learning and evaluation and how they go about implementing related instruction.

The power of writing both as a tool of communication and reflection cannot be underestimated. The present study is the first phase of a larger project geared to fully understand the role that writing plays in the lives of teachers, and, subsequently, in the lives of the children that they teach.

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Appendix A

**Undergraduate Students Self-Efficacy in Writing Scale
Items and Factor Loadings**

1. I can write a term paper	-540
2. Writing an essay or paper is always a slow process.	515
3. Studying grammar and punctuation would greatly improve my writing.	465
4. Having my writing evaluated scares me	411
5. I expect good grades on essays or papers.	-411
6. I need special encouragement to do my best writing	387
7. I do well on essay tests.	-381
8. I can write simple, compound and complex sentences	-373
9. My writing rarely expresses what I really think.	357
10. I like to work in small groups to do revision in writing.	351
11. The most important thing in writing is observing the rules of punctuation and grammar.	348
12. I often do writing assignments at the last minute and still get a good grade.	-331
13. I cannot revise my own writing because I cannot see my mistakes.	285
14. If the assignment calls for 1000 words, I try to write just about that many.	259

Appendix B

Teachers Self-Efficacy in Writing Scale

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1. I worry so much about my writing that it prevents me from getting started.	647
2. I need special encouragement to do my best academic writing.	639
3. I can write a research paper without any help or instruction.	-601
4. I do well on tests requiring essay answers.	-564
5. Having my writing evaluated scares me.	561
6. I can't revise my writing because I cannot see my own mistakes	537
7. I like to work in small groups to discuss ideas or to do revision in writing	477
8. I expect good grades on academic papers.	-453
9. I am familiar with the components of a research paper or thesis	-447
10. Writing an essay or paper is always a slow process	417
11. Studying grammar and punctuation would greatly improve my writing.	350

Appendix C

Deep and Surface Writing Characteristics

Deep Writing	Surface Writing
Reflective	Reproductive
High or alternating level of focus	Focus at the local level
Hierarchical organization	Linear, sequential structure
Engaged	Detached
Audience concern	Less audience concern
Thinks about essay as an integrated whole	Sees essay as an organized display
Thesis-driven	Data-driven
Revision	Editing
Coherence	Cohesion
Transforming, going beyond assignment	Telling within the given context
Autonomous	Rule-bound
Feelings of satisfaction, coherence and connectedness	